

many artificial swarms only, as we think necessary to prevent natural swarms. Or we do not want any increase at all to keep the whole force of a colony together and have it as strong as possible during the honey flow. For this reason we have to select different ways for the prevention of swarming. If we make swarms artificially, we can make one or more swarms, from every colony strong enough, or we make one swarm, from two such colonies, or we take the material to form a new swarm from a larger number of colonies. All this is done for a permanent increase. A second way is, when no increase is wanted, to divide a strong colony for some days only, and when the swarming fever has passed, we unite these two colonies again. A third way is to manipulate the colony in such a way without dividing it, that it will not or can't swarm, we will consider these three ways. There are again many different ways of artificial swarming. During many years I used the well-known plan to make 3 out of 2. A strong colony A is shaken into a new hive with starters or full sheets of foundation, and this hive is set on the old stand of A. The brood combs without bees are placed into another hive and this is set on the stand of another strong colony B, and the colony B receives a new stand C. To the colony now at B a queen, fertilized or virgin, or even a queen-cell, is introduced. If the honey flow is good and of long duration this plan can be used and with profit, but the colony at B is in a bad condition for some days, having no young bees to feed the larvae. A part of them may starve and be drawn out afterwards. The colony C has lost all the field-bees, and if the hive does not contain very thin, watery honey, the young bees can't prepare the necessary larvae-food, and some of the young brood is lost again.

except we give some water to this colony in some way till some of the young bees will fly out to gather this water outside. Since ten years I prefer for these reasons another plan, especially recommendable if we want very little increase. I take from a colony which I expect, would make preparation to swarm, three or four brood-combs (three of my frames have not quite as much surface as two Langstroth frames). The bees from these combs are shaken back into their hive. In place of these brood-combs empty combs or frames with full sheets of foundation are given to this colony. Eight of these brood-combs from different colonies are set into another storey and two empty combs added. This storey is set on top of another strong colony over a queen-excluding honey-board. In this way I go through the yard till all colonies strong enough are managed. In about two or three hours these brood-combs over the excluders will be covered with young bees, and now I remove them again.

Two such storeys, with brood and bees, from two different colonies, will form a new colony, which is placed on a new stand, a queen in a cage close by with candy is introduced, and at the beginning of the honey flow one or more supers are given to this colony, and this bee-yard is safe for ten days at least. The advantage of this plan is that the colonies are weakened not more than is necessary to prevent swarming, and the new colonies are at once ready to store honey. Hereby it is important that we take mostly capped brood from the colonies, and that we give the frames of foundation in the proper place. Our purpose is that this foundation should be drawn out and eggs should be laid in these cells at once by the queen, therefore they must be given in such a place where the queen will lay.